ISOLASI DAN SELEKSI BAKTERI EPIBIOTIK KARANG *Porites lutea* Milne Edwards & Haime PENGHASIL ANTIBAKTERI

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ABSTRAK

Penelitian tentang isolasi dan seleksi bakteri epibiotik karang *Porites lutea* Milne Edwards & Haime penghasil antibakteri telah dilaksanakan pada bulan November 2017 sampai Maret 2018 di Laboratorium Riset Mikrobiologi, Jurusan Biologi Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Andalas, Padang dan Laboratorium Veteriner Regional II Bukitinggi. Tujuan penelitian ini yaitu menemukan isolat bakteri yang terdapat pada karang *P. lutea* di Pantai Taman Nirwana, Kota Padang, mengetahui aktivitas antibakteri isolat bakteri serta karakter isolat bakteri karang *P. lutea* penghasil antibakteri tersebut. Penelitian menggunakan metode eksperimen dengan hasil dianalisa secara deskriptif. Hasil penelitian didapatkan 5 isolat yang memiliki aktivitas antibakteri. Aktivitas antibakteri terbesar ditunjukan oleh isolat BKSA 2 dengan zona hambat 45,1 mm terhadap *Escherichia coli* dan 45,2 mm terhadap *Staphylococcus aureus.* Hasil identifikasi berdasarkan uji biokimia menunjukan bahwa isolat BKSA 2 adalah *Bacillus* sp.

Kata kunci : antibakteri, *Bacillus* sp., bakteri epibiotik, *Porites lutea*

ABSTRACT

Research about isolation and selection epibiotic bacteria from coral *Porites lutea* Milne Edwards & Haime to produce antibacterial compound have been done from November 2017 until March 2018 in research laboratories of Microbiology, Biology Department of Mathematics and Natural Science Faculty, University of Andalas, Padang and in Veterinary Laboratory of 2nd Regional Bukitinggi. The purpose of this research is to find bacteria isolated on the coral *P. lutea* and to know the antibacterial activity also character of bacteria isolated from corals *P. lutea* in Nirwana Beach Park, Padang city. The research used experiment method and the result was analyzed descriptive. The results obtained 5 isolates that have antibacterial activity. The best antibacterial activity was produced by the BKSA 2 with inhibitory zone 45,1 mm in diameter against *Escherichia coli* and 45,2 mm in diameter againts *Staphylococcus aureus*. The identification of bacteria based on biochemical test showed that isolates BKSA 2 is *Bacillus* sp.

Key words: antibacterial, *Bacillus* sp., epibiotic bacteria, *Porites lutea*